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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,645

09/28/2006

Magnus Pelz

P/1228-214

1626

2352 7590 09/04/2009
OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER

DUFF, DOUGLAS J

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

09/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,645	Applicant(s) PELZ ET AL.	
	Examiner DOUGLAS J. DUFF	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/29/09 has been entered.

DETAILED ACTION

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brookshire et al. (US 7013879) in view of Aupperle et al. (US 2004/0050374). Regarding claim 1, Brookshire et al. discloses an arrangement for recirculation of exhaust gases in a supercharged combustion engine (168), the arrangement comprising an exhaust line (178) operable to lead exhaust gases out from the combustion engine; an inlet line (188 to 196) operable to lead first air at above atmospheric pressure to the combustion engine; a compressor (188) positioned at the inlet line and configured to compress the first air; a return line (182) comprising a connection to the exhaust line and a connection to the inlet line, and configured to

Art Unit: 3748

recirculate the exhaust gases from the exhaust line to a position of the inlet line downstream of the compressor (188); a cooler (190) operable to cool the exhaust gases in the return line; an air cooler (194) cooled by ambient air, the air cooler being incorporated in the inlet line downstream from the connection of the return line to the inlet line so that, when the exhaust gases are returned via the return line, the air cooler cools a mixture of the exhaust gases and the first air before the mixture is led to the combustion engine (194, Fig. 8). Brookshire fails to disclose the return line cooler being a liquid-medium cooler operable to cool the exhaust gases in the return line by use of a liquid medium.

4. Aupperle teaches a liquid-medium cooler operable to cool the exhaust gases in the return line by use of a liquid medium (paragraph 0017). It would have been obvious for a person having ordinary skill in the art at the time the invention was made to utilize a liquid-medium cooler in the return line in order to efficiently reduce the temperature of the exhaust to a design temperature before returning the exhaust to the intake line.

5. Regarding claims 2, 4-7, 9 and 10, the modified Brookshire device discloses the arrangement including an arrangement according to claim 1, further comprising a cooling system containing the liquid medium (paragraph 0017) operable for cooling the combustion engine, an EGR valve (184) incorporated in the return line, a control unit (the inherent controller that operates 184) for the EGR valve, wherein the combustion engine is a diesel engine or an Otto engine (background), a turbine (180) positioned and operable to be driven by the exhaust gases in the exhaust line which are not led

Art Unit: 3748

into the return line, and a compressor operable to be driven by the turbine so that the compressor compresses the air in the inlet line (188).

6. Claims 3, 8 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brookshire in view of Aupperle as applied to claim 1 above, and further in view of Zurawski et al. (US 6601387). The modified Brookshire device discloses the device above, but fails to disclose the liquid-medium cooler positioned in close physical proximity to an engine coolant cooler operable to cool the liquid medium for cooling the combustion engine, a venturi between the return and inlet line, the air cooler positioned parallel to an engine coolant cooler along a main extent of the air cooler, and a fan positioned and configured to cool both the engine coolant cooler and the air cooler.

7. Zurawski et al. teaches a cooler (154) positioned in close physical proximity to an engine coolant cooler (166) operable to cool the liquid medium for cooling the combustion engine, a venturi (col. 1, lines 45-50) between the return and inlet line, the air cooler (154) positioned parallel to an engine coolant cooler along a main extent of the air cooler (Fig. 2), and a fan (164) positioned and configured to cool both the engine coolant cooler and the air cooler. It would have been obvious for a person having ordinary skill in the art at the time the invention was made to utilize a cooler arrangement as described in order to reduce the required space for the cooling equipment while increasing the system efficiency through the combination of cooling systems.

Response to Arguments

8. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS J. DUFF whose telephone number is (571)272-3459. The examiner can normally be reached on M-Th 7 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas E. Denion/
Supervisory Patent Examiner, Art Unit 3748

/Douglas J Duff/
Examiner, Art Unit 3748
9/1/09